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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,194	12/06/2000	Harpreet Singh Sawhney	SAR 13800	8583
31908	7590	11/14/2003	EXAMINER	
STEVE MENDELSON MENDELSON & ASSOCIATES, P.C. 1515 MARKET STREET, SUITE 715 PHILADELPHIA, PA 19102			VO, TUNG T	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,194

Applicant(s)

SAWHNEY ET AL.

Examiner

Tung T. Vo

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 3,8-11,13,14,17,23-25,29 and 30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 04/16/01 has been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-2, 4-7, 15-16, 19-22, 26-28, and 31-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (US 6,097,842).

Re claims 1 and 5, Suzuki discloses an encoder (figs. 1-5, 10, and 12) for encoding a video stream (1 of fig. 12), the encoder comprises:

a frame/regions type selector (21 of fig. 15) for selecting different processing paths (lower layer picture, upper layer picture, and key signals) for encoding (22 and 25 of fig. 15) different frames/regions into encoded video stream (bitstream, the output of the multiplexer 26);

a first processing path (25 of fig. 15, and fig. 22) configured for encoding, into the encoded video stream, a first original frame/region (upper layer) in the video stream using intra-frame coding to generate an encoded first frame/regions; and

a second processing path (23 of fig. 12, and fig. 23) configured for encoding, into the encoded video bitstream, a second original frame/region (upper layer) using motion-based prediction coding (LOWER LAYER MOTION VECTOR PREDICTION MODE of fig. 23), wherein the video encoder has an encoding mode (42 of fig. 23) in which at some motion information used (32 of fig. 23) during motion-based predictive coding is excluded from the encoded video bitstream.

Re claims 2-3, and 6-7, Suzuki further discloses wherein the video encoder is scaleable video encoder (col. 19, lines 20-54) that can be operated at a plurality of different encoding modes; wherein:

a first encoding mode, all of the motion information is excluded from the encoded video bitstream and the encoded video bitstream does not explicitly include any motion information (I frame has been encoded by both upper and lower layer encoders (23 of fig. 23 and 25 of fig. 22; see also figs. 18A and 18B));

a second encoding mode, at least some of the motion information is encoded into encoded video bitstream (36 of figs. 22 and 23, e.g. VLC (36) encoded the motion vector into the encoder video bitstream for P frame); wherein second encoding mode, a first portion of motion information is encoded into the encoded video bitstream (video object is encoded, fig. 17A) and second portion (background of the picture, fig. 18B, has no motion is encoded into the encoded video bitstream);

a third encoding mode, all of the motion information is encoded into the encoded bitstream (B frame has been encoded using full motion information by encoder (36 of figs. 22 and 23).

Re claims 4 and 12, Suzuki further discloses a third processing path configured for encoding, into the encoded video bitstream, a third original frame/region in the video stream tweening (the applicant discloses video stream tweening is an interpolating process) based on the motion used to encode the second original frame/region (24 of fig. 15, e.g. the lower decoded frame/region is enlarged (interpolated) by the resolution conversion 24 and the enlarged or interpolated frame/region to the encoder 23 of fig. 23).

Re claims 15-16, 20-22, 26-28, 31-35, Suzuki further discloses a decoder (figs. 6-8, 11 and 27-31) decodes the encoded video bitstream. The decoding process is reversible of the encoding process as disclosed in Suzuki (cols. 5-7, 27-30).

Allowable Subject Matter

4. Claims 3, 8-11, 13-14, 17, 23-25, 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Suzuki et al. (US 6,535,558 B1) discloses a picture signal encoding method and apparatus, picture signal decoding method and apparatus and recording medium.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


PATENT EXAMINER

T.Vo

Tung T. Vo
Examiner
Art Unit 2613